

**ATTACHMENT A**  
**Remarks**

Claims 1-24 are pending in the present application. By this Amendment, Applicants have amended claims 1-5 and added new claims 6-24. Applicants respectfully submit that the present application is in condition for allowance based on the discussion which follows.

In the Office Action mailed September 1, 2006, the Examiner rejected claims 1-5 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Nos. 5,765,617 (Mierau et al.), 5,884,682 (Kennedy et al.) or 4,879,659 (Bowlín et al.).

As described in the present specification, typically a planer system processes rough boards at speeds from 100 to 2000 feet per minute. As also described, it is one object of the present invention to retro-fit optimized planers into such conventional planers as being a more cost-effective upgrade than replacing the entire planer. Further as described, in such planers the boards are fed linearly through the planer in what may be described as ribbon-feeding, that is, end-to-end one after another. The volume of an optimizing planer's production is then controlled in part by the lineal feed speed which can be accommodated by the planer and, when using an optimizing planer according to the present invention, the size of any required gaps between adjacent workpieces to allow time for processing of the optimized planing solution and re-setting between boards of the relative positions between the cutting elements and the infeed because of different optimized planing solutions for each board. The less gapping there is between workpieces the higher the production for a given feed speed.

Consequently, as described in the present specification (page 12, lines 24-26), optimizing planing of workpieces may include not only optimizing the planing of a single

workpiece, that is, considered as a stand-alone piece to be optimized by adjusting the location within the piece of a desired or optimized cross-sectional profile, but also optimizing planing of adjacent workpieces considered as a series of end-to-end boards by adjusting the "workpiece-to-workpiece" location of the desired cross-sectional profile. This is neither taught nor suggested in the cited prior art, and is now recited in independent claims 1-5. Further, the size of the gaps may also be minimized if a number of separate scanners are used, each scanning a section of the board to be planed, and then the geometric profile or other defect data from each scanner, meter, gauge, sensor or other defect detector compiled into one workpiece property information profile for each workpiece. This is also neither taught nor suggested in the cited prior art and is now the subject of dependent claims 6-10. These claimed features are supported in the specification for example at page 11, lines 20-21, and page 14, lines 2-14 and therefore claims 6-10 do not constitute new matter.

In a further aspect, the present invention also provides for constraining the positioning of the location of the desired cross-sectional profile within the workpiece to balance the amount of self-produced defects, the example being given of twist, bow and snipe (page 13, lines 13-15). This is also neither taught nor suggested in the cited prior art and is now the subject of dependent claims 11-15.

In yet a further aspect of the present invention, the specification describes (for example on page 15, lines 11-21, and on page 16, lines 7-19) moving either the infeed or the cutting element to provide for up-and-down, pitch and twist movement in the former and, additionally, forward-and-backwards, side-to-side, and skew movement in the latter. At least the twisting relative movement it is submitted is neither taught nor

suggested in the cited prior art and would not have been expected as the cant forming and cant breakdown machines in the cited prior art, although adapted to curve saw, are not adapted to twist (x-axis rotation as defined in the present application) for at least the reason that circular saws with the disclosed saw guides can not be intentionally twisted through the cut in x-axis rotation about the longitudinal axis of the cant. New independent claims 16 and 22 recite the limitations of claims 1 and 3 as originally filed respectively and additionally recite the limitation that the relative movement includes the above described up-and-down, pitch and twist movements.

New dependent claims 17-21 depend from claim 6. Claim 17 recites the limitations, that the relative movement between the workpiece and the cutting element includes side-to-side and skew. Claim 18 recites the limitations that the optimizing planer includes a plurality of linear positioners for actuating the relative movement between the workpiece and the cutting element. Claim 19 recites the new limitations added to claim 1. Claim 20 recites the limitations of claim 16. Claim 21 recites the limitations of claim 11.

New dependent claims 23-24 depend from claim 22. Claim 23 recites the limitations of claim 17. Claim 24 recites the limitations of claim 18.

Applicant notes that the cited prior art relates to the breakdown of cants or logs in a sawmill and consequently applicant does not concede the relevance of such sawmilling art to the art of planers for finishing of rough boards. However, applicant presents the claim amendments herein in order to assist Examiner in clarifying patentable distinctions over the prior art, wherein many such distinctions are supported in the specification, and without prejudice to the later filing of divisional, continuing, or

continuation-in-part applications claiming priority from the present application and having claims commensurate in scope with those as originally filed in the present application.

Based on the foregoing, Applicants respectfully request that the rejection of claims 1-5 be withdrawn and the present application be found to be in condition for allowance.

**END REMARKS**